

# ITEMS

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## THE SOUTHWEST PROJECT IN COMPARATIVE PSYCHOLINGUISTICS: A PROGRESS REPORT\*

by Joseph B. Casagrande

THIS report had best begin with a brief exegesis of the formidable and somewhat cryptic title of the project which is currently the main concern of the Council's Committee on Linguistics and Psychology: "Southwest" because the research site was the Southwestern United States; "Comparative" because coordinate studies were undertaken among six Southwestern groups partaking of a variety of cultural traditions and speaking diverse languages—the Navaho, Hopi, Zuni, Spanish-American, Hopi-Tewa, and the related Tewa-speaking people of Santa Clara Pueblo. In addition, data were collected on English-speaking persons from these groups, and on native white speakers of English. Finally, the title includes the term "Psycholinguistics" because a major objective of the research is to test the general hypothesis that the structure of a language (specifically, its lexical, grammatical, and phonetic features) influences certain nonlinguistic behavior of its speakers, e.g., cognitive processes such as perception, conceptualization, and problem solving.

### ORIGIN AND PLANNING OF THE PROJECT

The Southwest Project marks the culmination of a number of Council activities that have contributed to

\* A condensation of the report made at the annual meeting of the board of directors of the Social Science Research Council, September 1956. For previous statements concerning the Southwest Project of the Committee on Linguistics and Psychology, see *Items*, June 1955, pp. 17-18, and March 1956, p. 8. The present members of the committee are: James J. Jenkins, University of Minnesota (chairman); John B. Carroll, Harvard University; Alvin M. Liberman, University of Connecticut; Floyd G. Lounsbury, Yale University; Charles E. Osgood, University of Illinois; Thomas A. Sebeok, Indiana University; and Rulon S. Wells, Yale University. Mr. Casagrande serves as committee staff.

the development of the emerging field of psycholinguistics. The first to be noted was the interuniversity summer research seminar on linguistics and psychology held in 1951 at Cornell University under the chairmanship of John B. Carroll. Although there were other outcomes, the essential accomplishment of this seminar was to bring the two disciplines into communication. Another result was the appointment of the Committee on Linguistics and Psychology in the fall of 1952, to plan and develop research on language behavior. As its first major undertaking the committee planned a second seminar on psycholinguistics, which was held at Indiana University in the summer of 1953 under the chairmanship of Charles E. Osgood. The product of this seminar was a monograph, *Psycholinguistics: A Survey of Theory and Research Problems*, published jointly as an Indiana University Publication in Anthropology and Linguistics and as a Supplement to the *Journal of Abnormal and Social Psychology*, October 1954. As its title indicates, the monograph was primarily theoretical and programmatic. In the view of the committee the logical next step was to test the utility of its approach, and during 1954 plans were developed for a major research undertaking—the Southwest Project in Comparative Psycholinguistics.

The project was launched early in the summer of 1955, with support from a grant to the Council by the Carnegie Corporation of New York. John B. Carroll, a former chairman of the committee, was appointed director of the project. During the summer of 1955 a general research training and planning seminar or workshop was held at the University of New Mexico for all project personnel. There the research staff received brief, intensive instruction in disciplines and techniques that

would be needed; for example, the psychologists were given training in linguistics, while the anthropologists and linguists received instruction in relevant psychological concepts and techniques. Linguistic work was begun by all staff members with informants speaking the languages involved in the research; and through lectures, independent reading, and field trips some familiarity was gained with the cultures being examined and with the varying field situations in which experimental work was to be done in the summer of 1956. Perhaps most important was the designing of experimental and observational procedures adapted for use in the field among the various groups to be studied. Many of these procedures were also pretested. Field teams, each consisting of at least one psychologist and one linguist or anthropologist, were formed and assigned to work respectively with the Navaho, Hopi, Zuni, Spanish-American, and Hopi-Tewa and Santa Clara Tewa groups.

As a guide to field workers and to insure greater comparability of data, a field manual outlining the experimental and observational procedures developed during the summer was compiled during the academic year 1955-56 by the director and Susan Ervin of the project staff. This 156-page manual, together with supplementary materials prepared since its issue, describes about 30 field procedures designed to test comparatively a range of both general and specific hypotheses relating features of linguistic structure to nonlinguistic phenomena at both the cultural and individual psychological levels. After revision in the light of field experience it is hoped that the manual can be made available to persons undertaking psycholinguistic research among other groups.

### SOME BASIC RESEARCH PROBLEMS

Special attention has been given in the project to empirical testing, by experimental methods, of the "linguistic relativity hypothesis" associated with the names of Edward Sapir and his sometime student, Benjamin Lee Whorf, linguist and philosopher of language. According to this hypothesis, a language channels the psychological processes of its speakers and subtly but significantly shapes their view of the world. However, the testing of this hypothesis is by no means the sole objective of the project. Indeed, such a global proposition cannot be tested *in toto*, nor can its limits be easily sounded; it must necessarily be tested piecemeal. Thus, whether affirmative or negative, the results of the project cannot be construed as confirming or refuting the "linguistic relativity hypothesis" as a whole, but only in part.

On the assumption that an important component of culture is a *structure of shared meanings*, and that this

structure is represented in symbol systems, one of which is language, procedures such as Charles E. Osgood's semantic differential, tests of the generality of synesthesia and metaphor, and word association, which are designed to tap these patterns of shared meanings, have been adapted and developed for cross-cultural use. It should be stressed that the concern is as much with the *generality* of psycholinguistic phenomena as with unique relationships between linguistic and nonlinguistic behavior in particular languages and cultures. One can be only too easily impressed with the differences among languages and with the putative effects of these differences on their speakers; what seems to be even more impressive is the fact that languages everywhere are so very much alike.

Since many of the persons who served as subjects in the experimental studies spoke more than one language, particular attention was also given to the development of measures of bilingualism in order that the effect of this variable could be assessed. Finally, a portion of the research has been of a more traditional ethnolinguistic and linguistic nature. The present reporter did some work on the range of reference of anatomical terms in Navaho, which ultimately may be compared with similar terms in English. Other staff members were engaged in basic descriptive analyses of several languages that previously have been little studied.

### FIELD RESEARCH

The second phase of the project, field research, was begun in June 1956. Seventeen social scientists—all but two of whom hold the doctorate in anthropology, linguistics or psychology, and most of whom have been trained in two of the disciplines and have a special interest in language behavior—spent the summer months in field work among the six groups. The data are collected but they have not yet been analyzed. At this stage one has only impressions of trends in the data, not firm research findings. However, we learned much, not only of substance but also of the methods and problems of our intellectual counterparts. The summer's experience was a sobering one for both linguist-anthropologists and psychologists. The former, accustomed to working with relatively few informants, found it rather tedious to acquire a respectable "number of cases," and we worried a good deal about this problem. The latter, accustomed to using such highly accessible subjects as white rats or college sophomores, found it rather wearing to pursue the elusive and sometimes reluctant Indian subject who, once his cooperation was secured, was often baffled by the requirements of the experimental procedure.

Space does not here permit detailed description of the many field procedures that were used. Suffice it to say that about half of the 30-odd experiments were conducted among at least two of the groups, and several were done among all groups. Many of the remainder were either adapted to only one group or of particular interest to only one research worker. Resources of time, energy, and personnel did not permit the use of all possible procedures with all six groups, nor did the general research design call for such a strategy. However, it appears that sufficient subjects were obtained in each group to make possible statistical analysis of the data. Detailed reports on various aspects of the research will be published during the coming months, and present plans call for the preparation of a general report on the project as a whole.

### A NAVAHO EXAMPLE

The kind of research with which the project is concerned may be illustrated by a study conducted by the writer among Navaho children.

It is obligatory in the Navaho language to use a particular one of a set of verbal forms according to the shape or some other essential attribute of the object about which one is speaking. Thus, if I ask you in Navaho to hand me an object, I must use the appropriate verb stem depending on the nature of the object. If it is a long flexible object such as a piece of string, I must say "šańleh"; if it is a long rigid object such as a stick, I must say "šańtin"; if it is a flat flexible material such as paper or cloth, I must say "šańlcos," and so on. Because of this obligatory categorization of objects in Navaho, it seemed reasonable that Navaho-speaking children would learn to discriminate the formal attributes of objects at an earlier age than their English-speaking compeers. The finding of American (and European) psychologists that children tend first to distinguish objects on the basis of size and color might—at least at the level of verbal facility in dealing with these variables—be partly an artifact of the particular language they used. The hypothesis was, then, that this feature of the Navaho language would affect the relative order of emergence of such concepts as color, size, shape or form, and number in the Navaho-speaking child, as compared with English-speaking children of the same age, and that Navaho-speaking children would be more inclined than the latter to perceive formal similarities between objects.

This hypothesis was tested using a variety of experimental materials and several different procedures. Although the test was expressly adapted to Navaho, the design as well as the basic hypothesis could be extended to other languages since all languages have obligatory

categories (in English, for example, we must distinguish between singular and plural, and specify whether an action occurred in the past, present, or future).

To put the child at ease and to accustom him to the experimental situation, as well as to gauge his ability to perform a simple task, he was first asked to match objects shown to him with each of a set of objects arrayed before him. This matching task was called Procedure I. Five sets were used in sequence. Set A consisted of six familiar, "functional" objects, each of which takes a different verb form in Navaho; these were a washcloth, a spoon, a piece of string, a bunch of wool, a wooden block, and a little pile of kernels of corn. Set B consisted of a series of less familiar, "nonfunctional" objects, each corresponding to a member of Set A and each also taking a different verb stem; these were a piece of aluminum foil, a steel bit, a section of steel spring, a bit of steel wool, a metal cupcake mold, and a little heap of split lead shot. Set C consisted of five variously shaped blue wooden blocks of comparable size: a cube, sphere, cylinder, pyramid, and oblong, all of which in Navaho take the same verb stem. Set D consisted of five variously colored square blocks of the same size: white, black, red, yellow, and blue. Set E consisted of large, small, and medium-sized blocks painted blue and of the same basic shapes as in Set C. Thus, each set of objects varied in only one of the crucial characteristics of interest: Sets A and B in the verbal form taken, Set C in shape, Set D in color, and Set E in size. The matching task was easily accomplished by all children, and they regarded it as a pleasant sort of game.

The second procedure involved the same five sets of objects and a sixth set of small, variously shaped blocks which were used to test the child's comprehension of the terms for the numbers 1 through 5. This time the child was given what was called a "minimal verbal cue" and instructed to hand the experimenter each object in the set, or in the case of the sixth set (Set F) the appropriate number of objects, as they were designated. The verbal instructions were phrased so that only a single word that carried the information essential for selection of the proper object varied within the same linguistic frame. The test was scored by noting the correct and incorrect choices on a tally sheet.

In the actual conduct of the experiment a third procedure was interposed between Procedures I and II and was also repeated at the end of the experimental session, after an interval of 30–60 minutes, to secure reliability data. Ten pairs of objects were used, each of which differed significantly in two respects, e.g., color and size, color and shape, size and shape, color and verb form, shape and verb form. These pairs of objects, called Ambiguous Sets, were shown to the child, one pair at a



time. The child was then shown a third object similar to each member of the ambiguous set in only one of the two relevant characteristics, but of course matching neither, and was asked to tell the experimenter which of the pair went best with the object shown to him. For example, one pair consisted of a square white block and a blue pyramidal block of comparable size. The child was then shown a square blue block and could select one of the pair on the basis of either shape or color. Another pair consisted of a yellow stick and a piece of blue rope of comparable size. In this instance the child was shown a yellow rope, and the basis of his choice could be either color again or material *and* verb stem, since different verbal forms are used for a length of rope and a stick. The children were not at all baffled by the ambiguity inherent in the task; their choices in whatever direction were invariably made with little or no hesitation.

A fourth and last procedure was used, but in a second experimental session and employing some children who had not participated in the first session as well as some who had. The same five sets of objects described above and a set of 55 pictures of commonplace objects comprised the experimental materials. In this procedure both the child and the mother of the child served as subjects. As before, the sets, including the pictures, were arrayed one set at a time before both mother and child; but in this case only the mother was shown one at a time objects identical with those in the various sets, and she was instructed simply to ask her child to hand her the one in the set that was like the one shown to her. These sessions were tape-recorded for later transcription and analysis of the linguistic materials. This phase of the study had a twofold purpose: to collect under controlled conditions, from a sample of mothers and their children of various ages, data that might yield information about "mothers' language"; and to see which characteristics of objects were singled out by mothers in describing these various objects to their children so that they could make the correct choices. An incidental hypothesis was that the younger the child, the more the redundancy in the mother's instructions.

Most of the testing was done in the hogans with the aid of an interpreter, and usually in the presence of parents, grandparents, older siblings, and other interested and very curious relatives. The subjects were 140 Navaho children, ranging from about three to about ten years of age. Grouping three- and four-year-olds together and nine- and ten-year-olds together (differences in age at these extremes apparently do not significantly affect the results), the 140 subjects are about equally distributed among the six age groups, and there are at least 20 subjects in each.

As mentioned above, the degree of bilingualism, or even multilingualism, is an important factor in all the groups studied in the Southwest Project. In order to exercise some control over this variable, a measure of bilingualism among the 140 Navaho children was necessary. This was obtained through the use of a simple test, and through brief interviews with the child and the parents or other close relatives to obtain information on such relevant factors as schooling, language usually spoken at home, language usually spoken with playmates and siblings, etc. The bilingualism test consisted of two parts, a *decoding* task and an *encoding* task. The set of 55 cards picturing commonplace objects, which was also used in Procedure IV, was divided into two decks, A and B. In the decoding task these were arrayed successively before the child who was asked to point to the object named, first in Navaho and then in English. For the encoding task the decks were interchanged, and the child was asked to name the pictures serially, deck B in Navaho and deck A in English. Since younger children frequently were not able to distinguish which of the two languages they were using in naming the pictures, in the encoding task they were usually asked simply to name the pictures and they responded in English or Navaho as they chose. Later in the session the child was asked to recall the names of the pictures he had seen earlier, in order to determine which language would predominate in the names recalled.

On the basis of the results of the bilingualism test, the background information obtained in interviews, and the actual performance of the child in the experiment (which was conducted in Navaho or, with the appropriate modifications in the instructions, in English as indicated), it is possible to classify the 140 subjects in five groups: monolingual in Navaho, Navaho predominate, balanced bilingual, English predominate, and monolingual in English. By design, subjects were impressionistically selected so that they would be distributed among these five groups.

What of results? It must be stated emphatically that at this stage the results are still somewhat impressionistic and are not statistically confirmed. However, on preliminary inspection the findings appear to be in the predicted direction. Navaho-speaking children, i.e., Navaho monolinguals and Navaho predominate children, seem to be more alert to the essentially formal characteristics of objects than their English-speaking opposites. While this finding seems to emerge from several of the various procedures used in the study, it is perhaps clearest in Procedure III, which involved the use of ten pairs of ambiguous objects. Navaho-speaking children of all ages, it appears, tend to make a greater number of "Navaho choices" (form and/or verb stem

over color or size), than do English-speaking children of like ages. The difference in the proportion of "Navaho choices" seems to be most marked at the younger age levels; using age and number of "Navaho choices" as the coordinates, the curves which one may imaginatively plot tend to converge as age increases.

If sustained by further analysis, the results of this study among Navaho children, as well as of other component

studies in the Southwest Project on Comparative Psycholinguistics, may yield new insights into the role of language in the psychology of cognition and into the relations between language and other culture patterns. But, regardless of the specific results, a small contribution will have been made to the larger task of putting the "linguistic relativity hypothesis" to a rigorous empirical test.

## THE SEMINAR ON COMPARATIVE POLITICS, JUNE 1956

by Gabriel A. Almond

A FIRST research planning seminar was held by the Committee on Comparative Politics<sup>1</sup> at Gould House in Dobbs Ferry, New York, June 11-29. The purposes of the seminar were to acquaint scholars in the field of comparative government and politics with the opportunities under the committee's new program,<sup>2</sup> and to enlist their interest and aid in its further development. The sessions were attended by more than 50 scholars, including specialists on American, European, Latin American, African, Asiatic, and Middle Eastern politics, and also anthropologists, economists, historians, and sociologists with interests in this field. The seminar was the first occasion on which political scientists engaged in research in all the major world areas had opportunity to appraise the state of knowledge of political processes in these areas and to discuss research strategies and methods with their colleagues in other social sciences.

Attendance at individual seminar discussions was limited to 20 persons, which permitted easy and informal exchange of views. The invitations were so arranged that each country or area specialist not only presented an appraisal of research on his own area, but also participated in discussions of research problems in several other areas. The resulting communication across the boundaries of area specialization was deemed most rewarding by the participants.

The first week of the seminar was concerned with general problems encountered in the planning of comparative studies of political groups and processes. During the first two days reports were given on five comparative

studies currently under way in various social science fields: on the interuniversity study of labor problems in economic development, by Frederick H. Harbison of Princeton University; the research program in international communication, by Ithiel de Sola Pool of Massachusetts Institute of Technology; studies of the foreign policies of Russia, China, and the United States, by Walt W. Rostow also of the Institute; the Harvard University comparative study of values, by John M. Roberts of the University of Nebraska; and the comparative study of the village, by Robert J. Smith of Cornell University.

This part of the program was intended to introduce the seminar to different types of comparative research design, but the discussions in these first two days also made explicit a number of substantive insights and hypotheses. It appeared that the objectives and problems of the comparative study of labor in economic development were similar in several respects to the program of the Committee on Comparative Politics. In planning the former study the four major collaborators—John T. Dunlop of Harvard University, Frederick H. Harbison, Clark Kerr of the University of California, Berkeley, and Charles A. Myers of Massachusetts Institute of Technology—began with theories of labor and of the labor movement based primarily on American and European experience. One of their major purposes was to test the validity of these theories by empirical studies of the labor force and industrial development in European and non-Western areas. In the course of these studies the focus of the investigators changed from an emphasis on the role of labor unions in the development of modern industrial economies to a concern with the more complex processes of recruitment, commitment, and structuring of the total labor force in societies characterized by different rates and patterns of industrialization. Similarly in political science, contemporary

<sup>1</sup> The members of the committee are Gabriel A. Almond, Princeton University (chairman); Taylor Cole, Duke University; James S. Coleman, University of California, Los Angeles; Roy C. Macridis, Washington University; Sigmund Neumann, Wesleyan University; Guy J. Pauker, University of California, Berkeley; Lucian W. Pye, Massachusetts Institute of Technology; Walter R. Sharp, Yale University; *staff*, Bryce Wood.

<sup>2</sup> For a description of this program see *Items*, March 1956, pp. 1-2.

theories of governmental institutions, political parties, pressure groups, and public opinion tend to be based on American, and to a lesser extent on Western European, experience. More careful empirical studies of political processes in the European area and particularly in non-Western areas may be expected to improve our general theories of politics and of such specific institutions as legislatures, bureaucracies, parties, and pressure groups.

One aspect of the comparative study of labor in economic development, namely, the stress on the interdependence of theoretical and field research, seemed especially suggestive for the committee's program. The major collaborators in the labor study both supervise and participate in the field research, and they meet frequently to cumulate their findings in an orderly way. Thus empirical data and conclusions are quickly assimilated into a growing body of knowledge, and new hypotheses developing out of theoretical discussion are tested in the field. It was explicit in the seminar discussions that this close and creative connection between theory building and empirical research should be maintained in the program of the committee.

The discussion of the comparative study of the village indicated a significant opportunity for collaboration by anthropologists and political scientists in research on comparative politics. In studying tribal and village cultures the anthropologist tends to look for the original social patterns, and to sift out the newer influences resulting from the impact of industrialization, nationalism, and the like. The political scientist is concerned not only with the functioning of the traditional system, but with the amalgamate political patterns resulting from westernization, with the processes of acculturation, and with the ways in which the different "cultural components," such as the westernized city, the traditional village, and tribe, affect the political process. The discussion of this study also suggested possibilities for fruitful collaboration by political scientists, sociologists, and anthropologists in examining the connections between the central, urban aspects of non-Western societies and the traditional units, and in observing the processes of political acculturation.

The reports by John M. Roberts on the comparative study of values and by Francis X. Sutton on applications of social theory to the study of political systems also proved to be suggestive for the committee's program. The classification of types of value orientation, which is one of the products of the values study, and Talcott Parsons' concept of "pattern variables" both appeared to be applicable in distinguishing the cultures and ideologies of different political systems.

The last three days of the first week were devoted to

discussion of the central problems confronting the committee in the development of plans for needed research. These problems had been formulated in an agenda paper prepared by Gabriel A. Almond and Myron Weiner of Princeton University in an attempt to codify the views of the committee on research strategy. The paper specified four central problems for discussion: (1) the rationale of the choice of "political groups" as a focus for comparative study; (2) types of countries or individual "cases" which might be included in comparative studies; (3) aspects of political groups which might be selected for intensive investigation; and (4) problems of empirical methodology in comparative studies in areas with markedly varying conditions of research. The paper had argued that comparative studies of political processes should be focused on the different ways in which political choice is organized in different political systems. Political groups were defined as the units or "actors" that initiate, advocate, aggregate, or coerce political choice. It was recognized that these units and their interaction differ strikingly from one political setting to the next. In the West the functions of political initiative, representation, advocacy and the like are largely performed by political parties, pressure groups, and the specialized media of communication; but this is rarely true in the non-Western areas, where formal governmental agencies (such as bureaucracies and officer corps) and kinship, lineage, and tribal groups function as political groups along with parties and interest groups of Western types.

A modification of this emphasis on political groups was suggested by those participants who had had experience with the operation of bureaucracies in non-Western areas. They pointed out that even the beginnings of party and interest group organization are lacking in some such areas, that their legislatures have had little if any political significance, and as a consequence the political process has tended to operate largely within the bureaucracy. One outcome of this discussion was a proposal, initiated by Taylor Cole of Duke University and Walter R. Sharp of Yale University, that the possibilities of a comparative study of the political role of bureaucracies be explored. The committee subsequently arranged for preparation of memoranda on this subject.

The second problem was that of identifying areas and countries where research on the political process might be particularly rewarding. The agenda paper had argued that while the committee's ultimate objective was to bring its field closer to achievement of a genuinely comparative theory of political systems, the present state of the field did not justify a global comparative effort. It was pointed out that no common body of scholarship deals with comparative politics. The pro-



fession is divided into specialists on Europe, Africa, the Middle East, South Asia, Southeast Asia, and East Asia. If the political scientists dealing with these areas were confronted with the problem of selecting, say, 15 research sites in the roughly 100 independent countries in the world today, it is difficult to see how they would undertake to solve the problem.

It was suggested that the scale of comparative research must be related to the professional and intellectual structure of the discipline. This would mean that comparative studies might be planned effectively on an area basis by the various groups of specialists. The committee could encourage the selection of common problems, facilitate the reporting of research results on an inter-area basis, and stimulate comparative theoretical efforts to synthesize the findings of these studies.

On the third problem placed before the seminar, the selection of particular aspects of the political process for comparative study, the agenda paper presented a check list of possible research topics, i.e., types of groups and the various aspects of their functioning. Thus a comparative program might emphasize the internal characteristics of interest groups or political parties, or both, the interrelations among such groups and parties, the patterns of access of political groups to governmental decision-making and public policy, or to the social structure, or some combination of these aspects. The agenda paper argued that the final choice of emphases would depend on the state of knowledge and salience of problems in the different areas, as well as the skills and experience of the specialists on the respective areas. It was generally agreed in discussion that field work in an area should be undertaken only by scholars having thorough knowledge of its history and social, economic, and cultural characteristics. A second point was that the field work should stress *function* and the interrelationships between political, cultural, and social processes.

On the fourth problem, that of methods of comparison, the agenda paper indicated that the wide variety of conditions and differing degrees of knowledge of countries even within the same geographic area made precise comparisons of political groups and processes difficult. Comparability of research findings might be attained through asking the same questions in studies of different political systems. As far as methods of field research were concerned, every effort might be made to gather comparable data, even though there would necessarily be differences in kind and reliability. Thus in one country refined interviewing and sampling methods might be possible; in another there might have to be heavier reliance on cruder interviewing procedures, on historical materials, and direct observation of political behavior. The applicability of particular

methods and the degree of precision to be attempted were viewed as field research decisions. It was recognized that in reporting the findings of such research explicit statements concerning the methods employed, the types of data obtained, and their limitations would be essential.

In this connection the question whether the committee proposed to carry out its program through "research teams" was raised. In the view of the seminar any requirement that would eliminate or discourage research by individuals would be highly undesirable. On the other hand, the committee might provide opportunities for recipients of its grants and other scholars working on similar problems to engage in common research planning and to exchange findings and insights during and after field work. The particular patterns of cooperation which might develop would depend on the free choice of the participants as well as on considerations of efficiency and the availability of resources for these purposes.

During the second and third weeks of the seminar these general problems were considered with respect to specific areas and countries. Each discussion was led by two or three specialists who appraised the state of knowledge and the available research personnel in their particular area, and then made recommendations as to research sites and aspects of the political process which might best be studied.

During these weeks, also, several provisional proposals for comparative studies were explored. The Western European specialists appeared to agree that a comparative study of the actual functioning of political parties and interest groups might distinguish more accurately the different types of political systems in their area. Such a study might include the United Kingdom, France, Germany, and Italy, a Scandinavian country, one of the Low Countries, Austria, and either Spain or Portugal. It was suggested that research on the history of the Eastern European countries between the two World Wars might make significant contributions to the theory of authoritarian political systems.

The discussions of the non-Western areas produced similar suggestions, each of which reflected the special conditions of an individual area. Thus in an African comparative study that is already under way, problems arising from the transfer of authority from colonial regimes to native leaderships are stressed. In the Middle East, a selection of research sites that would represent different degrees of modernization, different ethnic and religious patterns, and different types of political structure was proposed. It was thought that differences in these three aspects would be adequately represented by six research sites—in Turkey, Saudi Arabia, Afghani-

stan, Lebanon, Egypt, and Iraq. Taking the availability of resources and personnel into account, a good beginning might be made by study of Turkey, Egypt, and Saudi Arabia. The Latin American specialists suggested different patterns and rates of economic development and their political consequences as a basis for the selection of research sites and aspects of politics for comparative study. The Southeast Asia specialists proposed political parties and interest groups, the political role of the bureaucracy, and the role of the army as three possible bases for comparative study in their area.

The seminar discussions also led to a number of specific decisions regarding the committee's program. Plans were made to promote collaboration among recipients of grants for field studies under the program of the com-

mittee. It was suggested that research on comparative politics would be aided by preparation of a series of theoretical memoranda under the committee's auspices. Specific proposals for such memoranda fell into four main groups: (1) "area-scale" analyses, which might attempt to generalize about the peculiar characteristics of the political systems in the major non-Western regions; (2) general structural analyses, for example, drawing together the available knowledge of totalitarian and authoritarian systems; (3) broad institutional comparisons of types of political parties, interest groups, bureaucracies, and legislatures; (4) "process analyses" of such problems as the relationships between economic and political acculturation, social stratification and politics, and patterns of nationalism and political development.

## COMMITTEE BRIEFS

### ANALYSIS OF ECONOMIC CENSUS DATA

John P. Miller (chairman), Francis M. Boddy, Robert W. Burgess, Howard C. Grieves, Frank A. Hanna, George J. Stigler, Ralph J. Watkins, J. Fred Weston.

In the belief that the data resulting from the censuses of manufactures, business, and mineral industries are insufficiently known and used by economists and statisticians, this new committee has been appointed to assess, in cooperation with the Bureau of the Census, the feasibility of various types of analyses of economic census data, to plan selected experimental analyses, and to encourage competent research personnel to undertake such efforts. At meetings of the committee on September 26 and October 29 a number of topics were suggested for monographic treatment, and four were formulated as follows: (1) a study of the industrial boundaries and concepts underlying current census classifications (in relation to actual characteristics of particular industries) in order to determine their validity in economic research; (2) an examination of the statistical data on companies, collected in 1954, to assess their usefulness in economic analysis and policy problems and to suggest possible ways of improving future censuses; (3) an examination of existing industrial data to ascertain their relevance for analyzing industrial concentration and mergers; (4) an analysis of differential growth in manufacturing by areas. The feasibility of analyzing problems of distribution in the light of the data afforded by the census of business, and ways in which the data from the census of mineral industries might best be utilized are also being explored. The committee will be glad to hear from individuals interested in these and comparable topics, or in other problems relating to the more effective use of the research sources provided by the economic censuses.

### ECONOMIC GROWTH

Simon Kuznets (chairman), Richard Hartshorne, Melville J. Herskovits, Edgar M. Hoover, Bert F. Hoselitz, Wilbert E. Moore, Joseph J. Spengler.

A conference on the state and economic growth organized by the committee was held in New York on October 11-13. As a basis for discussion papers had been prepared on the role of the state in American economic development between 1820 and 1890, by Henry W. Broude, Assistant Professor of Economics, Yale University; on the state and economic growth in Canada, by Hugh G. J. Aitken, Assistant Professor of Economics, University of California, Riverside; on "colonial socialism" in Australia from 1860 to 1900, by N. G. Butlin, Reader in Economic History at the Australian National University, Canberra; on the state and economic development in Russia from 1890 to 1939, by George B. Carson of the Service Center for Teachers of History, Washington; on opportunities, governments, and economic development in Manchuria, by Edwin P. Reubens, Associate Professor of Economics, City College, New York; on economic growth in Germany, by Norman J. G. Pounds, Chairman of the Institute of East European Studies, Indiana University; on elements in French and German development in the late nineteenth century, by William N. Parker, Associate Professor of Economics, University of North Carolina; on the historical conditions for the growth of the Swiss national economy, by Alfred Bürgin, Basle, Switzerland; on the role of the state in economic growth in eastern Europe, by Nicolas Spulber, acting chairman of the Indiana University Institute; and on the policy of etatism in Turkey, 1933-50, by Robert W. Kerwin, Cultural Attaché at the American consulate-general at Istanbul. More general papers were prepared by the three committee



members who were responsible for planning the conference, Messrs. Hartshorne, Hoselitz, and Spengler.

An appraisal of sociological theories relating to economic development, and a tentative formulation of possible empirical testing of various assumptions and propositions, has been undertaken for the committee by Arnold S. Feldman, Assistant Professor of Sociology, University of Delaware. Arrangements have been made with the Stanford University Food Research Institute for an analysis of the national income and expenditure accounts of selected underdeveloped countries, to be carried out by Harry Oshima, under the direction of William O. Jones. In this analysis an attempt will be made to test the validity of the national income accounts for the several countries by use of the data on agricultural production that have been accumulated within the Food Research Institute.

### HISTORICAL STATISTICS

G. Heberton Evans (chairman), Otis Dudley Duncan, Solomon Fabricant, Maurice I. Gershenson, Richard M. Scammon, Willard L. Thorp, Harold F. Williamson.

The committee, which was appointed in June to advise the Bureau of the Census on the preparation of a volume to replace *Historical Statistics of the United States, 1789-1945*, held its first meeting on November 26. The latter volume, published by the Bureau in 1949, was undertaken with the cooperation of an earlier Council committee under the chairmanship of J. Frederic Dewhurst. A tentative plan for periodic revisions could not be followed, but over the years a substantial number of suggestions concerning major changes or expansions of content have been received. Support for the committee's program has been obtained by the Council from the Ford Foundation. The new volume will include contributions by social scientists in universities and other organizations, as well as by the staff of the Census Bureau. Arrangements are being made for consultants to review the content of the present volume to point out gaps, needed additions, desirable substitutions of new material for series previously included, and possible improvements in annotation. Ways of presenting data on particular subjects will be investigated by experts, earlier historical series that may merit inclusion will be evaluated, and, in some instances, the compilation and integration of previously disconnected series will be attempted. It is expected that actual compilation will begin in 1957 and that publication may be possible in 1959.

### PACIFIC COAST COMMITTEE

#### ON SOCIAL STATISTICS

Calvin F. Schmid (chairman), Genevieve W. Carter, Maurice I. Gershenson, Emily H. Huntington, George M. Kuznets, Walter T. Martin, Davis McEntire, Lincoln E. Moses.

The first interstate conference on crime statistics in the western part of the United States was held under the

auspices of the committee in Stockton, California on April 18-19. Forty-one persons, representing a cross-section of practicing criminologists and penologists, police officials, sociologists, and statisticians from California, Oregon, and Washington comprised the participants. There were four sessions, each organized around a basic topic. The subject of the first session was Concepts, Techniques, and Problems of Criminal Statistics; the discussion leader was Ronald H. Beattie of the California Bureau of Criminal Statistics. The second session was devoted to Statistics of Juvenile Delinquency, with Edward E. Schwartz of the U. S. Children's Bureau leading the major discussion. The leaders of the third session, on Applications of Criminal Statistics for Research Purposes, were Calvin F. Schmid of the University of Washington and James Short of Washington State College. The final session on the Utilization of Institutional and Parole Statistics for Administrative Purposes was under the leadership of Donald L. Garrity of the University of Washington.

The proceedings of the Conference on Statistics of Labor-Management Relations, which was held at Asilomar, Pacific Grove, California, on May 12-13, 1955 under the joint sponsorship of the committee and the University of California Institute of Industrial Relations, Berkeley, have been published by the Institute.

C.F.S.

### RESEARCH TRAINING

Donald G. Marquis (chairman), Robert Dubin, Walter R. Goldschmidt, Arthur W. Macmahon, Frederick Mos-teller, Thomas C. Schelling, Everett K. Wilson; staff, Elbridge Sibley.

Reports on the four research training institutes held under the committee's auspices last summer indicate that they were effective in introducing the participating social scientists to research methods, theory, and data with which they had not previously had opportunities to become familiar. At the institute on quantitative research methods in agricultural economics, directed by H. B. James at North Carolina State College, most of the 30 students were staff members of land-grant colleges, experiment stations, and the research divisions of the U. S. Department of Agriculture. Formal courses of instruction were stressed more in this institute than in the others; the subject matter consisted largely of mathematical and statistical methods.

Seminars and workshops predominated over formal courses in the other three institutes; their enrollment was consequently restricted to 12-15 participants. Academic faculty members and research workers in public and private health agencies were about equally represented among the participants in the institute on survey methods in research on health problems, conducted in Chicago by Clyde Hart and other members of the staff of the National Opinion Research Center. Several visiting leaders in research took part in its sessions. "Survey methods" was interpreted to embrace not only opinion and attitude surveys, but also any other methods developed by social scientists which might be usefully applied to the study of health problems. Each par-

ticipant was given an opportunity to present a seminar report on his own research.

During each week of the institute on current research in international affairs, held at the University of Denver under the direction of John Gange of the University of Virginia, seminar discussions were led by visitors from research centers where new and unconventional research on international affairs is in progress. The institutions represented were Massachusetts Institute of Technology, Columbia and Princeton Universities, and the RAND Corporation. Enrollment was drawn mainly from the faculties of smaller colleges and universities. Subjects discussed included research on international communication; economic factors, civil-military relations, and internal political processes affecting foreign policy; and the comparative study of elite groups and political movements in foreign countries.

The purpose of the institute on law and social relations, held at Harvard University under the joint leadership of E. Adamson Hoebel, Professor of Anthropology at the University of Minnesota, and Harold J. Berman, Professor of Law at Harvard, was to introduce the participating sociologists, anthropologists, and political scientists to legal modes of thought and juridical processes, as a basis for further research on our own and other legal systems. The original hope that law-school faculty members might be included among the students was not realized, although several participants had received the LL.B. degree before taking a degree in social science.

In a research training seminar held at the University of Oregon, 15 graduate students of sociology from universities throughout the United States had the unusual experience of planning and carrying to completion in eight weeks a field study of Friendship and Social Values in a Suburban Community. The seminar was organized by Robert Dubin of the University of Oregon and directed by Robin M. Williams, Jr., of Cornell University. The Council joined with

the University of Oregon in sponsoring and financing the seminar as an experiment in research training. An observer designated by the Council has prepared an evaluative report which indicates that the idea of giving graduate students an opportunity for well-guided participation in all phases of a research project may commend itself to other universities. Like the Council's undergraduate research stipend program, but at a more sophisticated level, the seminar was designed to fill a too prevalent need for meaningful firsthand research experience before undertaking the doctoral thesis.

A meeting of the committee on November 3 was concerned with a general review of the fellowship programs, institutes, and other current and past activities of the Council relating to research training, and with a proposal that the Council undertake a study of research training problems, including both the recruitment and selection of students and the actual training process in selected schools or departments. Since the last previous Council study of related problems, reported in Bulletin 48 in 1948, is out of date in many respects and did not encompass some of the important relevant problems, the committee considered that a new study would be timely and desirable.

In preparation for the next meeting of the committee, individual members have accepted assignments to prepare memoranda on the following subjects: assessment of the Council's fellowship policies and practices, dissemination of reports on programs that are regarded as successful and worthy of emulation, the function of the doctoral thesis requirement, needs and opportunities for interdisciplinary training and postdoctoral training, and the problem of introducing intensive research training at an optimum point in graduate curricula. It is hoped that summaries of the members' experience in their own institutions and disciplines will provide points of departure for reassessment of prevailing research training practices and needs.

## PERSONNEL

### DIRECTORS AND OFFICERS OF THE COUNCIL

At the annual meeting of the board of directors of the Council held in September, Frank C. Newman of the University of California, Schuyler C. Wallace of Columbia University, Ralph J. Watkins of Dun and Bradstreet, Inc., and Donald Young of the Russell Sage Foundation were elected directors-at-large for the two-year term 1957-58.

Fred Eggan of the University of Chicago was elected chairman of the board of directors; Donald G. Marquis of the University of Michigan, vice-chairman; Frederick Mosteller of Harvard University, secretary; and Ralph J. Watkins, treasurer. The following members of the board were elected as its Executive Committee: Schuyler C. Wallace (chairman), Carroll L. Shartle of Ohio State University, Mortimer Spiegelman of the Metropolitan Life Insurance Company, C. Vann Woodward of Johns Hopkins Univer-

sity, and Donald Young. Douglas McGregor of the Massachusetts Institute of Technology was named chairman of the Committee on Problems and Policy; and Wilbert E. Moore of Princeton University and Philip E. Mosely of the Council on Foreign Relations were elected members of the committee. Its other members are V. O. Key, Jr., Frederick Mosteller, Joseph J. Spengler, and ex officio: Pendleton Herring, Fred Eggan, and Donald G. Marquis.

### APPOINTMENTS TO COUNCIL COMMITTEES

Lyle H. Lanier of the University of Illinois has been reappointed chairman of the Committee on Faculty Research Fellowships for the year 1956-57. William H. Nicholls of Vanderbilt University and John Useem of Michigan State University are newly appointed members; and Emmette S. Redford of the University of Texas, John W. Riley, Jr. of Rutgers University, and C. Vann Wood-

ward of Johns Hopkins University have been reappointed to the committee.

R. A. Gordon of the University of California has been named chairman of the Committee on Grants-in-Aid for 1956-57. E. Malcolm Carroll of Duke University, Gwendolen M. Carter of Smith College, and John Hope Franklin of Brooklyn College have been designated members; and Calvin S. Hall of Western Reserve University, and Stuart A. Queen of Washington University have been reappointed.

Earl Latham of Amherst College has been reappointed chairman of the Committee on Social Science Personnel, which has charge of the Council's research training fellowship program. Newly appointed to the committee for 1956-57 is Ward H. Goodenough of the University of Pennsylvania. Robert E. L. Faris of the University of Washington, Richard B. Heflebower of Northwestern University, Wayne H. Holtzman of the University of Texas, and Paul Webbink have been reappointed.

R. G. Bressler and Varden Fuller of the University of California have been named, respectively, chairman and secretary of the Committee on Agricultural Economics, and George K. Brinegar of the University of Connecticut has been appointed a member.

A new Committee on Employment Relationships and the Family has been appointed for 1956-57 as a successor to the former Committee on Labor Market Research, and in accordance with its recommendation, to plan research on family employment patterns in relation to family income and expenditures and in relation to the structure and functioning of the labor market. The members of the new committee are Dale Yoder of the University of Minnesota (chairman), Philip M. Hauser of the University of Chicago, John B. Lansing of the University of Michigan, Gladys L. Palmer of the University of Pennsylvania, and James Tobin of Yale University.

A new Committee on Historical Analysis, consisting of Louis Gottschalk of the University of Chicago (chairman), W. O. Aydelotte of the State University of Iowa, Thomas C. Cochran of the University of Pennsylvania, Merle Curti of the University of Wisconsin, and David M. Potter of Yale University, has been appointed to encourage the development of better methods for assessing the evidence underlying selected historical propositions or generalizations.

Robert R. Bush of the New York School of Social Work, Columbia University, has been appointed to the Committee on Mathematical Training of Social Scientists.

The following Committee on National Security Policy Research has been appointed for 1956-57, succeeding the former Committee on Civil-Military Relations Research: William T. R. Fox of Columbia University (chairman), Herbert Goldhamer of RAND Corporation, Henry A. Kissinger of the Council on Foreign Relations, Richard W. Leopold of Northwestern University, Col. George A. Lincoln of the U. S. Military Academy, John W. Masland of Dartmouth College, Arthur Smithies of Harvard University, and Harold Stein of the Twentieth Century Fund.

Dankwart A. Rustow of Princeton University has been

named staff assistant to the chairman of the Committee on the Near and Middle East.

Robert A. Dahl of Yale University and Dayton D. McKean of the University of Colorado have been appointed to the Committee on Political Behavior.

## PUBLICATIONS

### COUNCIL SERIES

*Migration and Mental Disease: A Study of First Admissions to Hospitals for Mental Disease, New York, 1939-1941*, by Benjamin Malzberg and Everett S. Lee, with an introduction by Dorothy S. Thomas. Sponsored by the Committee on Migration Differentials. March 1956. 152 pages. \$1.50.

*Labor Mobility in Six Cities*, prepared by Gladys L. Palmer, with the assistance of Carol P. Brainerd, for the Committee on Labor Market Research. June 1954. 191 pages. Paper, \$2.25; cloth, \$2.75.

*Research on Labor Mobility: An Appraisal of Research Findings in the United States*, Bulletin 65, by Herbert S. Parnes. October 1954. 216 pages. \$1.75.

*The Social Sciences in Historical Study: A Report of the Committee on Historiography*, Bulletin 64. July 1954. 191 pages. Paper, \$1.75; cloth, \$2.25.

*The Business Enterprise as a Subject for Research*, Pamphlet 11, by Howard R. Bowen. Sponsored by the Committee on Business Enterprise Research. May 1955. 111 pages. \$1.25.

The Council's monographs, bulletins, and pamphlets are distributed from the New York office of the Council.

### CENSUS MONOGRAPHS

These volumes are sponsored by the Committee on Census Monographs in cooperation with the Bureau of the Census, and are published by John Wiley & Sons, New York:

*American Agriculture: Its Structure and Place in the Economy*, by Ronald L. Mighell. April 1955. 199 pages. Cloth, \$5.00.

*Income of the American People*, by Herman P. Miller. October 1955. 222 pages. Cloth, \$5.50.

*Immigrants and Their Children, 1850-1950*, by E. P. Hutchinson. August 1956. 405 pages. Cloth, \$6.50.

*Social Characteristics of Urban and Rural Communities, 1950*, by Otis Dudley Duncan and Albert J. Reiss, Jr. October 1956. 458 pages. Cloth, \$6.50.

*American Housing and Its Use*, by Louis Winnick. December 1956. 154 pages. Cloth, \$5.00.

### CROSS-CULTURAL EDUCATION MONOGRAPHS

These monographs are sponsored by the Committee on Cross-Cultural Education and are published by the University of Minnesota Press, Minneapolis:

*The American Experience of Swedish Students: Retrospect and Aftermath*, by Franklin D. Scott. June 1956. 142 pages. Cloth, \$3.00.

*Indian Students on an American Campus*, by Richard D. Lambert and Marvin Bressler. December 1956. About 120 pages. Cloth, \$3.00.



## SUMMER INSTITUTES TO BE HELD IN 1957

APPLICATIONS for admission to four institutes to be held in the summer of 1957 will be accepted through January 7. Three of these institutes, like those sponsored by the Council in 1956, are designed to give research workers of post-doctoral standing and exceptionally qualified advanced candidates for the doctorate an opportunity to become familiar with research methods, theories, or data that are relevant to their research interests but have not been fully accessible to them.

The institute for college teachers of mathematics, jointly sponsored by the Council and the Mathematical Association of America, is designed to contribute to better adaptation of undergraduate mathematics courses to the needs of students of the social sciences.

Enrollment in each institute will be limited, and the programs will be adapted as far as possible to the particular interests of those admitted. The institutes will not confer academic credits. Stipends and travel allowances will be offered by the Council to participants whose expenses are not defrayed by the institutions where they are regularly employed. No tuition fees will be charged.

The following brief descriptions of the institutes are amplified in separate circulars. These circulars and application forms will be furnished on request by the Council's Washington office, 726 Jackson Place, N.W., Washington 6, D. C.

### ORGANIZATION THEORY AND RESEARCH

Place: Carnegie Institute of Technology, Graduate School of Industrial Administration, Pittsburgh, Pa.

Dates: June 17 - July 26, 1957 (six weeks)

Staff: Herbert A. Simon (Director) and James G. March, Carnegie Institute of Technology; Robert F. Bales, Harvard University; Robert L. Chapman, RAND Corporation; Donald C. Pelz, University of Michigan

Program: Seminars on organization theory, field research methods, laboratory research methods, and (optionally) mathematical theories of organizational behavior will be followed by practice in development of research designs.

Number of participants: 12

### RESEARCH ON CREDIT AND MONETARY POLICY

Place: Washington, D. C.

Dates: June 24 - August 2, 1957 (six weeks)

Co-sponsor: Board of Governors of the Federal Reserve System

Staff: Emmanuel T. Weiler (Director), Purdue University; Ralph A. Young (General Director), and other members of the research staff of the Board of Governors

Program: Groups will be assigned at two-week intervals to work in consultation with the Board's staff members on selected problems such as outlook for bank reserves, discount and market rates, reserve requirements, flow of funds, consumer finance surveys; results will be discussed in seminars attended by participants, staff, and others.

Number of participants: 15

### APPLICATIONS OF MATHEMATICS

#### IN SOCIAL SCIENCE RESEARCH

Place: Stanford University, California

Dates: June 24 - August 17, 1957 (eight weeks)

Staff: Robert R. Bush (Director), New York School of Social Work, Columbia University; other staff members listed below as workshop leaders

Program: Each participant will be enrolled in one of five workshops on the construction and use of mathematical models in selected fields. The fields and workshop leaders are: Psychology of Learning, Robert R. Bush; Linear Economic Models, Robert Dorfman, Harvard University; International Trade and Taxation, Lionel W. McKenzie, Duke University; Communication and Language, George A. Miller, Harvard University; Decision Processes and Measurement Theory, Patrick Suppes, Stanford University. There will be opportunity for individual consultation with staff members of this institute and of the institute for college teachers described below.

Number of participants: About 35; not more than 7 in each workshop

### MATHEMATICS IN SOCIAL SCIENCE FOR

#### COLLEGE TEACHERS OF MATHEMATICS

Place: Stanford University, California

Dates: June 24 - August 17, 1957 (eight weeks)

Co-sponsor: Mathematical Association of America

Staff: Robert M. Thrall (Director), University of Michigan; William K. Estes, Indiana University; Tjalling C. Koopmans, Yale University; R. Duncan Luce, Columbia University. Lecturers, John G. Kemeny, Dartmouth College; Albert W. Tucker, Princeton University; visiting lecturers to be announced

Program: Lecture series on applications of mathematics in economics, psychology, sociology; and on mathematical topics such as set theory, axiomatics, linear programming, game theory. Seminars on representative new applications of mathematics in social science. Workshops to develop problems and examples suitable for use in teaching mathematics to social science students.

Number of participants: About 40

## SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE, NEW YORK 17, N. Y.

*Incorporated in the State of Illinois, December 27, 1924, for the purpose of advancing research in the social sciences*

**Directors, 1956:** TAYLOR COLE, FRED EGGAN, ROBERT E. L. FARIS, R. A. GORDON, LOUIS GOTTSCHALK, PENDLETON HERRING, E. ADAMSON HOEEL, D. GALE JOHNSON, V. O. KEY, JR., LYLE H. LANIER, EARL LATHAM, DONALD G. MARQUIS, JOHN P. MILLER, PHILIP E. MOSELY, FREDERICK MOSTELLER, FRANK C. NEWMAN, ROY F. NICHOLS, CARROLL L. SHARTLE, RICHARD H. SHRYOCK, MORTIMER SPIEGELMAN, CONRAD TAEUBER, ROBERT L. THORNDIKE, SCHUYLER C. WALLACE, RALPH J. WATKINS, S. S. WILKS, GORDON R. WILLEY, MALCOLM M. WILLEY, ROBIN M. WILLIAMS, JR., C. VANN WOODWARD, DONALD YOUNG

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